

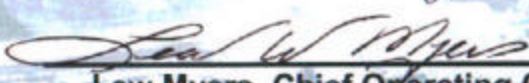
Davis-Besse Nuclear Power Station Operational Improvement Plan Operating Cycle 14

REVISION 0

Approvals:


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11/19/03
Date


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11/18/03
Date

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Introduction

To ensure continued improvements and sustained performance in Nuclear Safety and Plant Operation at the Davis-Besse Nuclear Power Station, the Leadership Team has developed this Improvement Plan to focus on key improvement initiatives and safety barriers essential to safe restart from the Reactor Pressure Vessel Head degradation extended plant outage and into subsequent operating cycles. **This plan provides for a managed transition from the organizational and programmatic actions taken to support the Davis-Besse Return to Service Plan and Building Block Plans to that of normal plant operations and refueling outages.**

The initiatives discussed in this plan were derived from lessons learned during the extended plant outage which resulted from the significant Reactor Pressure Vessel Head degradation identified at the beginning of the 13th Refueling Outage. During the extended outage, numerous improvements were made in the areas of Safety Culture, Management, Human Performance, System Health and Programs as described in the Return to Service Plan and the Building Block Plans. However, additional improvements are required to achieve world class performance and to ensure that the safety barriers that failed to detect the significant RPV Head degradation are maintained to prevent a recurrence of an event in the future.

As described in the Return to Service Plan, the numerous root causes associated with the Reactor Pressure Vessel Head degradation could be grouped into the areas of Nuclear Safety Culture; Management/Personnel Development; Standards and Decision-making; Oversight and Assessments; and Programs/Corrective Actions/Procedure Compliance. Actions described in each of the Building Blocks were designed to address numerous significant improvements in each of those areas. This transition plan of Operational Improvements focuses on the four primary safety barriers of **Individual**, **Programs**, **Management**, and **Oversight** (as described in the following pages) to ensure improvements realized during the extended outage remain in place and are further built upon to improve performance in the future. This plan will ensure that the improvements made to Davis-Besse are “built to last”.

This plan will be used by the Davis-Besse Leadership Team on a monthly basis to monitor safety barrier attributes that would provide early detection of declining trends in performance and to focus on major initiatives to achieve operational excellence. This plan is a living document and will be periodically updated and revised to address completed actions and add new initiatives as determined and approved by the Senior Leadership Team.

Barriers To Ensure Nuclear Safety

The safety of nuclear power relies heavily on the “defense in depth” concept. Nuclear power plants are designed with robust systems and redundant back-up safety systems in the unlikely event of a failure. However, systems and equipment must still be operated, maintained and designed by people to ensure reliability and availability if called upon to perform an intended safety function. The first barrier to ensure safety is the **Individual**. The operator, maintenance technician, engineer and all the other support personnel play an integral role in monitoring plant status and maintaining systems and equipment in top-notch condition. Thus, ensuring that the individuals that support nuclear power plant operation are highly qualified, trained and motivated to do the best job possible is an essential barrier to ensure nuclear safety.

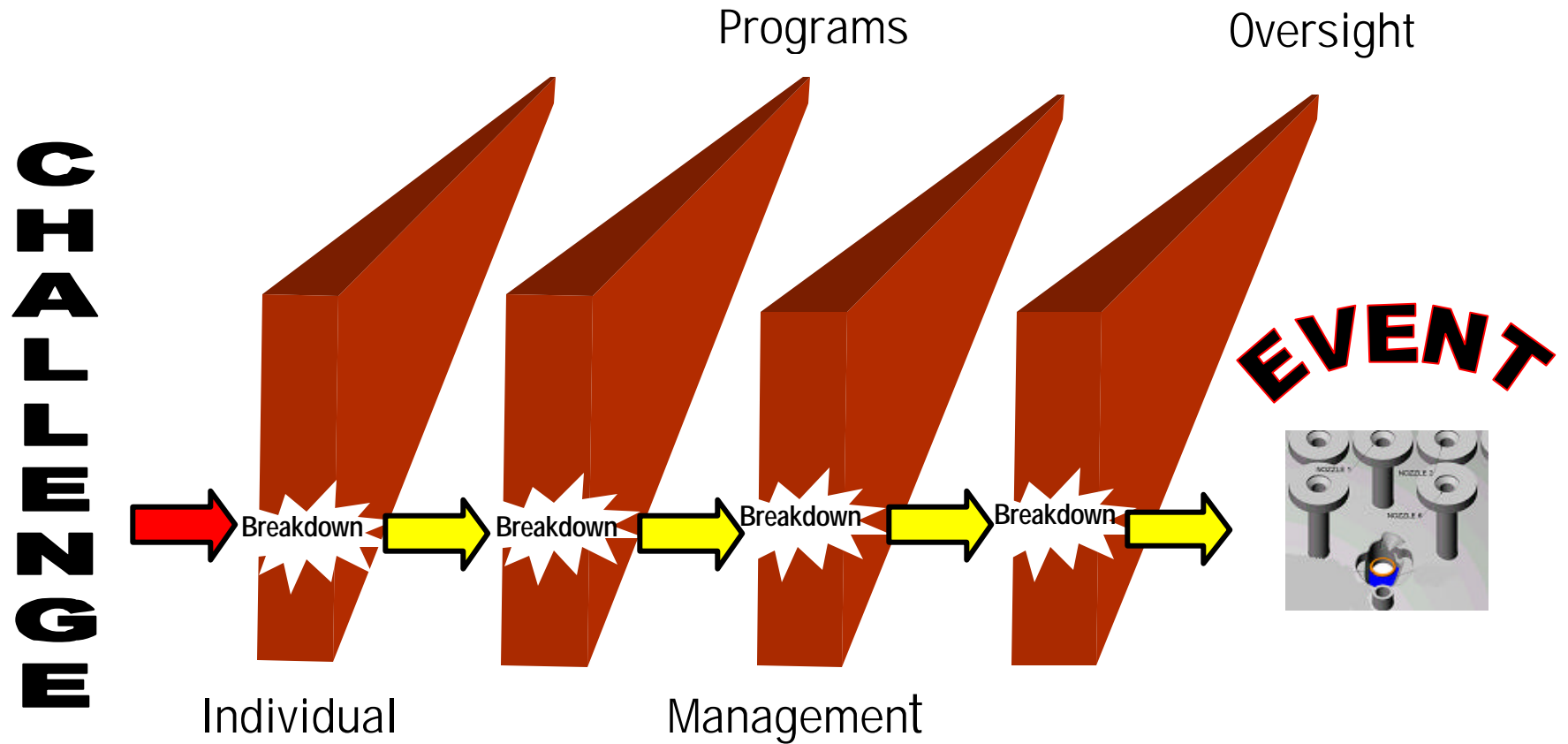
To guide the individual in performing their required job functions, numerous **Programs** have been put in place to address the operations, maintenance, design and licensing basis activities performed daily at the station. Programs are implemented by procedures and other written documents to ensure a consistent approach by the individual. Thus, programs are another essential barrier to ensure nuclear safety.

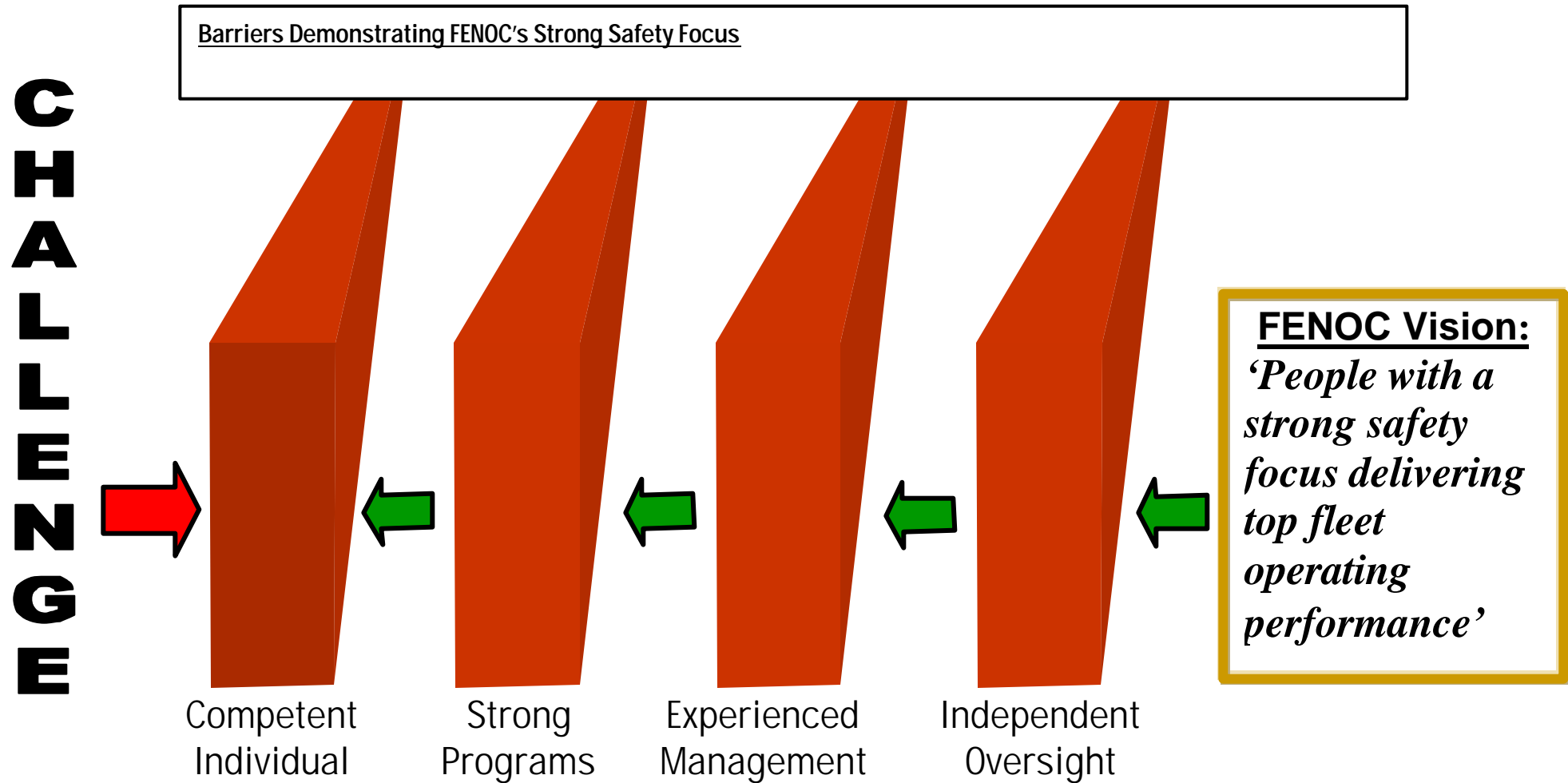
Management also plays a key role in nuclear safety. Management is responsible for providing the proper focus on priorities that ensure the plant is operated and maintained to high standards and expectations. Management is also responsible for creating a work environment that is conducive to a safety conscious work environment and strong safety culture, and to ensure there are adequate staffing levels of qualified and motivated individuals in every department. Management, therefore, is also considered one of the barriers essential to nuclear safety.

To ensure that the individual and management (using established programs and associated procedures) performs their duties to high standards and maintains the proper safety focus, **Oversight** organizations provide another barrier for nuclear safety. Oversight checks for adverse trends in performance and is independent of other pressures. Independent oversight, when properly used, can identify differences from industry norms for early detection of potential weaknesses developing in the safety barriers.

Together these four barriers work in conjunction to contribute to the safe operation of Davis-Besse.

This illustration represents how the four safety barriers failed, allowing the degradation of the RPV Head to go undetected for several years and serves to anchor the lessons learned and corrective actions taken to prevent recurrence.





Davis-Besse Initiatives:

Based on lessons learned from the Reactor Pressure Vessel Head degradation and during the extended plant outage, a series of key initiatives have been developed by the Leadership Team to focus on opportunities for continued improved performance. These initiatives extend beyond those significant improvements already realized during the extended outage and achieved prior to restart. These initiatives will provide additional improvements to further strengthen each of the four barriers. Details for each initiative are provided in the following pages.

<div style="text-align: center;">Davis-Besse Initiatives</div> <div>Sponsor</div>		Barriers Enhanced			
		Individual	Programs	Management	Oversight
M. Bezilla	1. Organizational Effectiveness Improvement		X	X	
B. Allen	2. Operations Improvement		X	X	
B. Allen	3. Maintenance Improvement	X	X	X	
B. Allen	4. Training Improvement	X	X	X	
B. Allen	5. Work Management Improvement	X	X	X	
J. Powers	6. Engineering Improvement	X	X		
M. Bezilla	7. Continuous Safety Culture Improvement	X		X	X
R. Schrauder	8. Procedure Improvement	X	X		
R. Schrauder	9. Corrective Action Program Improvement	X	X	X	X
L. Myers	10. Internal and External Oversight Improvement			X	X

1. Organizational Effectiveness Improvement Initiative

DESIRED OUTCOME: Improved Human Performance, Leadership and Team Alignment through Critical Self-assessments, Operating Experience, Industry Benchmarking and Communications

Sponsor: M. Bezilla

Key Actions	Owner	Completion
1. Improve individual and organizational performance and alignment through development and utilization of "alignment maps" at the Department/Section levels	J. Reddington	2nd Qtr 2004
2. Implement FENOC Business Practices for:	L. Dohrmann	1 st Qtr 2004
a) Focused Self-Assessments		1 st Qtr 2004
b) Ongoing Self-Assessments		1 st Qtr 2004
c) Benchmarking		1 st Qtr 2004
d) Quarterly Collective Significance Reviews		through Cycle 14
3. Directors and Managers to attend a Leadership Academy to improve management skills	D. Haskins	2 nd Qtr 2004
4. Provide formal Management Observation Skills Training	J. Reddington	2 nd Qtr 2004

1. Organizational Effectiveness Improvement Initiative continued

Sponsor: M. Bezilla

Key Actions	Owner	Completion
5. Enhance the Management Observation Program by ensuring personnel providing oversight monitoring are familiar with DBBP-OPS-0001, "Operations Expectations and Standards"	K. Fehr	2 nd Qtr 2004
6. Improve trending of major plant evolutions utilizing the Management Observation Program to track performance and feedback	K. Fehr	2 nd Qtr 2004
7. Provide face-to-face communications training to all site supervisors and above	D. Haskins	2 nd Qtr 2004
8. Re-evaluate all Davis-Besse supervisors to assess competency for current positions	D. Haskins	4 th Qtr 2005
9. Conduct Supervisor and Management Talent Management Talks	D. Haskins	1 st Qtr 2004
10. Continue with the 4 Cs meetings, D-B Team Meetings, Town Hall Meetings in accordance with Davis-Besse Business Practices	M. Lark-Landis	through Cycle 14

2. Operations Improvement Initiative

DESIRED OUTCOME: *Establish the clear leadership role of Operations through improved Organizational Effectiveness and Alignment to the FENOC Processes*

Sponsor: B. Allen

Key Actions	Owner	Completion
1. Implement the Operations Excellence Plan:		
a. Implement Operations Leadership Improvements	M. Roder	1 st Qtr 2004
b. Implement the 5 year staffing plan	M. Roder	1 st Qtr 2004
c. Implement improvements to Operations work stations	S. Wise	3 rd Qtr 2004
d. Implement common FENOC Operations work process tools	T. Stallard	4 th Qtr 2004
2. Improve Operator knowledge, skills and abilities through testing, training and mentoring	J. Reddington	4 th Qtr 2004

3. Maintenance Improvement Initiative

DESIRED OUTCOME: Improved Ownership and Materiel Condition of the Davis-Besse Nuclear Power Station

Sponsor: B. Allen

Key Actions	Owner	Completion
1. Improve Maintenance training and standards through post-job evaluations, use of operating experience, and lessons learned from rework activities	M. Stevens	1 st Qtr 2004
2. Improve Maintenance effectiveness through the assessment of work planning, scheduling, and implementation during critical equipment outages	M. Stevens	2 nd Qtr 2004
3. Improve Maintenance Supervision through training and development	M. Stevens	3 rd Qtr 2004
4. Improve Maintenance individual commitment area to establish improved ownership and accountability of Plant materiel condition	M. Stevens	4 th Qtr 2004
5. Improve Maintenance staff knowledge, skills and abilities through testing, training and mentoring	J. Reddington	4 th Qtr 2004

4. Training Improvement Initiative

DESIRED OUTCOME: Improved Individual And Organizational Performance through Training

Sponsor: B. Allen

Key Actions	Owner	Completion
1. Improve individual and organizational performance and alignment by developing and providing training on design and configuration control to appropriate site staff	J. Reddington	3 rd Qtr 2004
2. Establish engineering positional qualification requirements based on the standard FENOC Engineering Organization and complete qualification training for incumbent and new engineers	J. Reddington	4 th Qtr 2004

5. Work Management Improvement Initiative

DESIRED OUTCOME: *Provide for the effective and efficient cross-organizational utilization of resources in achieving a high standard of plant materiel condition by conducting the right work at the right time for the right reasons*

Sponsor: B. Allen

Key Actions	Owner	Completion
1. Common Process	G. Dunn	
a. Complete training and mentoring to support the effective transition into the FENOC Work Management Process		1 st Qtr 2004
b. Resolve gaps in process implementation and station procedures		2 nd Qtr 2004
c. Perform quarterly assessments of Condition Reports and Workweek critiques to ensure opportunities for improvement are addressed		through Cycle 14
d. Implement Risk Management process to improve station knowledge and awareness		1 st Qtr 2004
e. Monitor and improve Order Quality		2 nd Qtr 2004

5. Work Management Improvement Initiative continued

Sponsor: B. Allen

Key Actions	Owner	Completion
2. Maintenance Backlog Reduction	G. Dunn	
a. Complete walk-down and validation of the Order backlog to ensure proper category, priority, consolidation and elimination of invalid orders		4 th Qtr 2003
b. Complete Cycle Plan identifying equipment outages and providing the framework for addressing backlog Order priorities and results of the System Health Report		1 st Qtr 2004
c. Develop performance indicators to monitor and manage Order backlog		4th Qtr 2003
3. Outage Performance	G. Dunn	
a. Forced Outage Schedule template and readiness		1st Qtr 2004
b. Mid-Cycle Outage Preparation		1 mo. prior to Mid-Cycle Outage
c. Clarify expectations and improve contractor performance		4th Qtr 2004
d. 14 th Refueling Outage Preparation		4th Qtr 2005

6. Engineering Improvement Initiative

DESIRED OUTCOME: *Improved quality of Engineering products, increased access to Design Basis information, and continued improvement in Safety Margins of the Station*

Sponsor: J. Powers

Key Actions	Owner	Completion
1. Implement actions to improve Safety Margin:	J. Grabnar	
a. Determine the Safety Margin for the top 10 Risk Significant Systems and develop a plan to improve safety margins		2 nd Qtr 2004
b. Electrical System coordination improvements		4 th Qtr 2005
c. Masonry/block wall re-analyses and design changes		4 th Qtr 2005
d. Service Water improvements		through Cycle 14
2. Perform additional Latent Issues Reviews	B. Boles	through Cycle 14
3. Implement the Design Calculation Improvement Plan	J. Grabnar	4 th Qtr 2004
4. Enhance plant equipment performance through the FENOC Equipment Reliability Program	J. Rogers	through Cycle 14
5. Develop and implement the plan to enhance System Engineering ownership of plant systems in support of Operations	B. Boles	4th Qtr 2004

6. Engineering Improvement Initiative continued

Sponsor: J. Powers

Key Actions	Owner	Completion
6. Schedule and conduct additional Program Compliance Reviews including: a. Qualification of Program Owners b. Development of Program Manuals c. Creation of Performance Indicators	J. Powers	4 th Qtr 2004
7. Establish the appropriate level of workload for Engineering Change Requests and develop a plan to reduce and maintain the backlogs to that level	J. Grabnar	2 nd Qtr 2004
8. Perform semiannual effectiveness reviews to determine if the problem solving process, NOP-ER-3001 has been properly implemented during the previous period	B. Boles	through Cycle 14
9. Perform an independent outside assessment of the effectiveness of Engineering corrective and improvement actions	J. Powers	4 th Qtr 2004
10. Implement ATLAS software for electronic maintenance of calculations and populate with 5 systems	C. Hawley	2 nd Qtr 2004

7. Continuous Safety Culture Improvement Initiative

DESIRED OUTCOME: *Demonstrate a continuously improving Safety Culture at the Davis-Besse Nuclear Power Station*

Sponsor: M. Bezilla

Key Actions	Owner	Completion
1. Monitor Safety Culture on a monthly basis	M. Bezilla	through Cycle 14
2. Assess Safety Culture using the FENOC Business Practice	M. Bezilla	4 th Qtr 2005
3. Perform a Safety Culture assessment utilizing an independent outside organization	M. Bezilla	4 th Qtr 2004
4. Provide SCWE training to Site employees who have not completed the SCWE portion of the Site Employee Orientation Manual	L. Griffith	1 st Qtr 2004
5. Provide refresher training on SCWE and Safety Culture to Davis-Besse Supervisors and above	J. Reddington	3 rd Qtr 2004
6. NQA to perform two Safety Culture Assessments	S. Loehlein	4 th Qtr 2004/05
7. Employee Concerns Program group to perform two surveys of the Safety Conscious Work Environment	L. Griffith	4 th Qtr 2004/05

8. Procedure Improvement Initiative

DESIRED OUTCOME: Improved procedure use and adherence and standardized procedure change process

Sponsor: R. Schrauder

Key Actions	Owner	Completion
1. Perform Self-Assessments on procedure use and adherence	R. Schrauder	through Cycle 14
2. Review the Davis-Besse procedure change process to ensure alignment with FENOC standards for procedure preparation and revisions	L. Dohrmann	1st Qtr 2004
3. Provide training on procedure use and adherence	J. Reddington	2 nd Qtr 2004
4. Perform follow-up effectiveness reviews on procedure use and adherence	L. Dohrmann	4 th Qtr 2004

9. Corrective Action Program Improvement Initiative

DESIRED OUTCOME: *Improved effectiveness and implementation of the Corrective Action Program demonstrated through improved Station performance*

Sponsor: R. Schrauder

Key Actions	Owner	Completion
1. Implement the Apparent Cause Improvement Plan:		
a. Create a Subcommittee to the Corrective Action Review Board for review of Apparent Cause Evaluations	L. Dohrmann	4 th Qtr 2003
b. Identify Apparent Cause Evaluators	Managers	4 th Qtr 2003
c. Develop Training Program and Expectations and provide training to the Apparent Cause Evaluators	J. Reddington	4 th Qtr 2003
d. Qualify the trained Apparent Cause Evaluators using the Systematic Approach to Training	J. Reddington	1 st Qtr 2004
2. Establish the appropriate level of workload for Condition Report Evaluations and Corrective Actions and develop a plan to reduce the backlogs to those levels	L. Dohrmann	1 st Qtr 2004

10. Internal and External Oversight Improvement Initiative

DESIRED OUTCOME: *Oversight activities are provided to ensure improved Station performance and the integrity of the Safety Barriers are sustained at the highest levels*

Sponsor: L. Myers

Key Actions	Owner	Completion
1. Supplement quality oversight with off-site assistance to improve objectivity and ensure assessments are sufficiently critical	S. Loehlein	4 th Qtr 2003
2. Supplement management oversight with off-site assistance to improve objectivity and ensure assessments are sufficiently critical	M. Roder	4 th Qtr 2003
3. Focus more quality oversight on cross-functional activities and interfaces	S. Loehlein	1 st Qtr 2004
4. Review and revise the master assessment plan at all three FENOC sites	S. Loehlein	1 st Qtr 2004
5. Conduct an external assessment to evaluate the progress of organizational improvements in the areas of Critical Self-Assessments and Performance Observations	L. Myers	2 nd Qtr 2004
6. Utilize INPO Assist Visits to assess the effectiveness of Improvement Initiatives	M. Bezilla	4 th Qtr 2004

Safety Barrier Attributes and Goals

Safety Barrier attributes and goals have been identified within this plan to provide a focus on key parameters to assess and ensure that safety barriers are being maintained. These attributes, which are grouped by each of the four barriers, will be monitored monthly by the Davis-Besse Leadership Team.

Performance indicators contain the criteria for rating each attribute. Some attributes will be monitored by periodic assessments such as surveys or self-assessments to determine if the goal for that attribute is being met.

<u>Individual</u> Barrier Attributes				
Item	Attribute	Goal	Owner	PI Source
I-01	Event Free Clock	> 36.5 days on average	Reddington	P-06
I-02	Industrial Safety Performance	≤ 7 OSHA Recordables per year	Farrell	S-03
I-03	Radiation Protection events	≤ 2 events in any 4 consecutive quarters	Farrell	NRC Performance Indicator
I-04	Individual Error Rate	≤ 0.29 individual errors per 10,000 hours worked based on a 12 week rolling average	Reddington	P-03
I-05	Procedure and Orders use and adherence	Improving trend in Management Observations associated with Procedure and Order use and adherence	Allen	To be developed
I-06	Employee willingness to raise concerns	≥ 90% of individuals are willing to raise concerns to their supervisors or the Employee Concerns Program	Loehlein	NQA Interviews
I-07	Number of Operator Work Arounds	≤ 1 Level 1 and 2 Work Arounds <u>AND</u> Implementation plans for each Work Around	Roder	R-10
I-08	Number of Control Room Deficiencies	≤ 1 deficiencies <u>AND</u> Each deficiency corrected within 1 operating cycle	Roder	R-09
I-09	Percent of self-identified Condition Reports (CRs)	≥ 90% of Condition Reports are self-identified	Dohrmann	P-05

Individual Barrier Attributes				
Item	Attribute	Goal	Owner	PI Source
I-10	Cross-functional teamwork	≥ 75 Risk Assessment Indicator The Risk Assessment Indicator assesses each unit's risk of achieving safe and reliable operation. This indicator accomplishes this by measuring elements related to the probability and consequence of station events. Examples of elements making up this indicator include Probabilistic Safety Assessment, Aggregate System Health, Schedule Adherence, Activities Resulting in Reduced Trip-Logic, Schedule Stability, Scrams, Derates, Unplanned entry into Tech Specs, Entry into Abnormal Procedures	Dunn	FENOC Risk Assessment Performance Indicator for Davis-Besse
I-11	SRO reviews for Operability are performed in a timely manner	$\geq 95\%$ of SRO review required Condition Reports were reviewed for operability within 24 hours	Roder	CA-01
I-12	Employee willingness to use the Corrective Action Program	$\leq 5\%$ of individuals are not willing to use the Corrective Action Program	Griffith	SCWE/NQA Surveys
I-13	Worker confidence in raising safety concerns	$> 90\%$ of workers believe they can raise nuclear safety or quality concerns without fear of retaliation	Griffith	SCWE/NQA Surveys
I-14	Training Programs meet industry standards and effectively improve station performance as measured by NOBP-TR-1501	> 2.5 Training Program Performance Indicator	Reddington	P-02
I-15	Licensed Operator Requalification Training	$\geq 95\%$ pass rate in the Licensed Operator Requalification Training Program	Reddington	To be developed

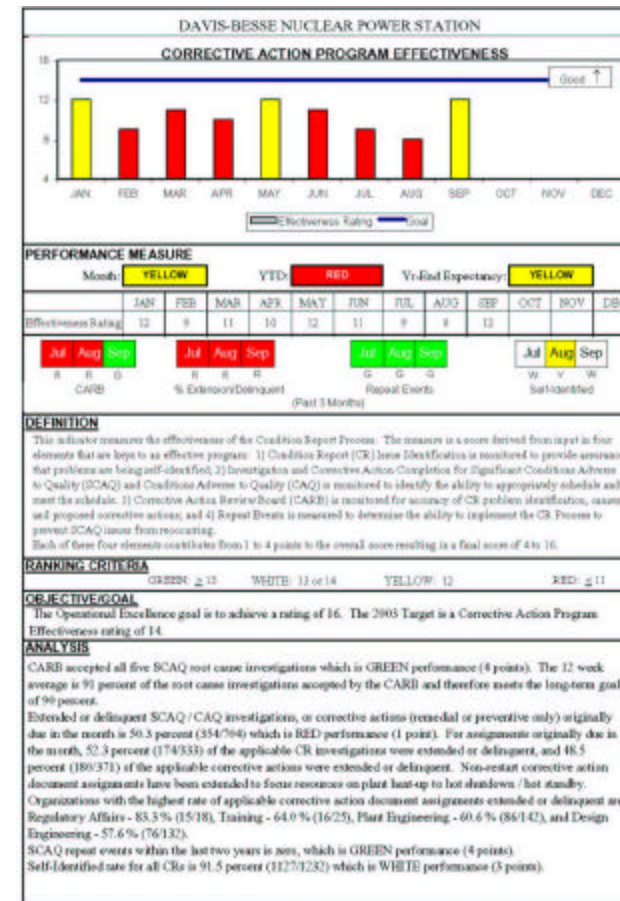
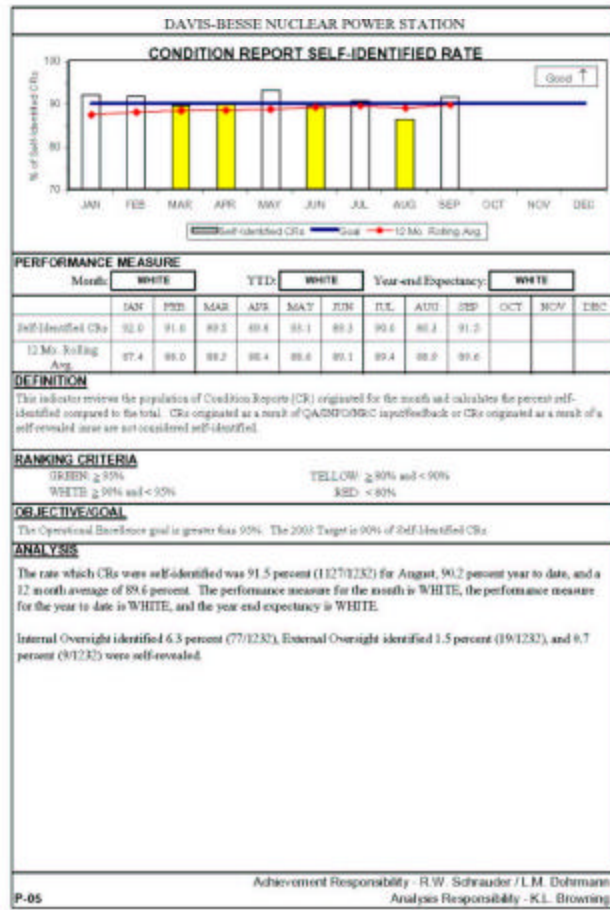
<u>Programs</u> Barrier Attributes				
Item	Attribute	Goal	Owner	PI Source
P-01	Effectiveness of Condition Report Process	≥ 14 Corrective Action Program Effectiveness	Dohrmann	P-01
P-02	Condition Report (CR) category accuracy	$\geq 90\%$ CR category accuracy rate	Dohrmann	CA-08
P-03	Apparent Cause evaluation quality	$\geq 90\%$ acceptance rate of Apparent Cause evaluations (as determined by the CARB Apparent Cause Subcommittee)	Dohrmann	CA-05
P-04	Maintenance Rule System Reliability	≥ 0.987 Reliability	Boles	S-05
P-05	Number of Maintenance Rule (a)(1) Systems	No repeat Maintenance Rule (a)(1) systems within the operating cycle	Boles	New Plant Engineering PI
P-06	Program and Process Error Rate	≤ 0.30 Program and process errors per 10,000 hours worked	Reddington	P-04
P-07	Maintenance Rework	$\leq 2.5\%$ rework	Steagall	Maintenance Rework PI
P-08	Number of late Preventative Maintenance Activities	0 PMs past their late or defer to date <u>AND</u> $< 10\%$ of PMs closed beyond 60% of the allowed grace period	Dunn	KPI-WM-06
P-09	Engineering Calculation Quality	≤ 1.0 score based on a 12 week rolling average (as measured by the Engineering Assessment Board Calculation Subcommittee)	Grabnar	To be developed

<u>Management Barrier Attributes</u>				
Item	Attribute	Goal	Owner	PI Source
M-01	The Quality of Engineering Products	≤ 0.5 score based on a 12 week rolling average (as measured by the Engineering Assessment Board)	Grabnar	EN-03
M-02	Satisfaction of employees using the Employee Concerns Program (ECP)	$> 75\%$ of employees that use the Employee Concerns Program report being satisfied with the process	Griffith	SCWE 3-4
M-03	NRC substantiated allegations	< 1.25 times the annual industry median of NRC substantiated allegations	Griffith	SCWE 4-2 & SCWE 4-6
M-04	Effectiveness of Safety Conscious Work Environment Review Team (SCWERT) in avoiding discrimination claims	< 2 times the annual industry median of discrimination allegations	Schrauder	SCWE 1-4
M-05	Management Observations are self critical	$> 90\%$ of the management observations performed are self-critical and recommended corrective actions were implemented	Fehr	Semiannual Assessments
M-06	Effectiveness of Management and Supervisors	Managers and supervisors are generally effective with a few exceptions	Loehlein	NQA Field Assessments
M-07	Improvements in Management Staffing	$\geq 75\%$ of open positions are filled within four months of the requisition receiving final approval <u>AND</u> Talent Management is in place for manager level positions and above <u>AND</u> Talent Management Candidates fill $\geq 70\%$ of open leadership positions	D. Haskins	To be developed
M-08	Reactivity Management	≤ 1 Level 2 Reactivity Management Event per year <u>AND</u> 0 Level 1 Reactivity Management Events per year.	Roder	Operations Reactivity Management PI

<u>Management Barrier Attributes</u>				
Item	Attribute	Goal	Owner	PI Source
M-09	Fuel Integrity	Zero fuel defects <u>AND</u> FRIP < 5.0E-4 microcuries/gram.	Kelley	R-07
M-10	Maintenance Order Backlog	<u>Online</u> : < 50 Corrective Maintenance Orders <u>AND</u> < 450 Elective Maintenance Orders <u>Outage</u> (prior to the startup from 14RFO): < 250 Corrective/Elective Maintenance Orders	Dunn	KPI-WM-02 KPI-WM-02 MA-01
M-11	Number of Temporary Modifications	≤ 5 during the Operating Cycle <u>And</u> 0 related to equipment and design deficiencies after restart from major outages	Boles	Plant Engineering PI
M-12	Backlog of Procedure Change Requests (PCRs)	≤ 100 open Priority 1 and 2 Procedure Change Requests	Dohrmann	PR-01
M-13	Design Basis Maintenance	USAR, Design Criteria Manual, System Description, Design Basis updates completed within 3 months of schedule	Grabnar	To be developed

<u>Oversight Barrier Attributes</u>				
Item	Attribute	Goal	Owner	PI Source
O-01	Field Activity Assessments	≥ 45 Observations completed per unit per month	Loehlein	DB-01
O-02	Responsiveness to QA Identified Issues	≤ 45 days for SCAQ Condition Report Investigations <u>AND</u> ≤ 60 days for CAQ Condition Report Investigations	Loehlein	DB-02
O-03	Condition Report NQA Review	≥ 90% of Condition Report Investigations reviewed by NQA are accepted or rejected within 15 days after the investigation was complete	Loehlein	DB-03
O-04	Corrective Action NQA Verification	≥ 90% of Corrective Actions verified or rejected by NQA within 30 days	Loehlein	DB-04
O-05	Timeliness of NQA Audit Report Issuance	≤ 25 working days from the date of the exit conference	Loehlein	DB-05
O-06	Use of Industry Peer Support	100% utilization of the scheduled INPO Assist Visits for 2004	Bezilla	To be developed

Examples of FENOC Performance Indicators for Davis-Besse



Appendix E – References

No.	Reference
	FENOC Documents
1.	Business Practice DBBP-BSA-0001, “Project Review Committee”
2.	Business Practice DBBP-VP-0001, “Safety Conscious Work Environment Review Team Charter”
3.	Business Practice DBBP-VP-0002, “Restart Readiness Review Extended Plant Outage”
4.	Business Practice DBBP-VP-0003, “Town Hall Meetings”
5.	Business Practice DBBP-VP-0004, “4Cs Meetings”
6.	Business Practice DBBP-VP-0005, “D-B Team Meetings”
7.	Job Familiarization Guideline TSM-115, “Boric Acid Corrosion Control Inspector”
8.	Licensee Event Report 1997-04
9.	Licensee Event Report 2002-02
10.	Licensee Event Report 2002-05
11.	Licensee Event Report 2002-06
12.	Licensee Event Report 2002-08
13.	Licensee Event Report 2003-01
14.	Licensee Event Report 2003-02
15.	Licensee Event Report 2003-03
16.	Licensee Event Report 2003-07
17.	“Operational Improvement Plan for Cycle 14”
18.	Long-Term Plan, “Operations Improvement Action Plan”
19.	Long-Term Plan, “Safety Culture Long-Term Improvement Plan”
20.	Report, “Assessment of Company Nuclear Review Board,” dated August 13, 2002
21.	Report, “Collective Significance Review of the Causal Factors Associated with the Reactor Pressure Vessel Head Degradation at Davis-Besse,” dated March 17, 2003
22.	Report, “Davis-Besse Nuclear Quality Assessment Quarterly Assessment Report DB-C-03-01 for January 1 to April 21, 2003,” dated May 28, 2003

Appendix E – References

No.	Reference
23.	Report, “Evaluation of Corporate Management Issues Arising from Degradation of the Reactor Pressure Vessel Head,” dated December 8, 2002
24.	Report, “Failure in Quality Assurance Oversight to Prevent Significant Degradation of Reactor Pressure Vessel Head; CR 2002-02578, dated 6-13-2002,” dated September 10, 2002
25.	Report, “Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head; CR 02-0685, 02-0846, 02-0891, 02-1053, 02-1128, 02-1583 02-1850 02-2584, and 02-2585,” dated August 13, 2002
26.	Report, “Ineffective Corrective Action Problem Resolution Human Performance and Implementation; CR 02-04884, Dated 8-23-02,” dated November 26, 2002
27.	Report, “Lack of Operations Centrality in Maintaining, Assuring, and Communicating the Operational Safety Focus of Davis-Besse and Lack of Accountability of Other Groups to Operations in Fulfilling that Role; CR 02-2581,” dated November 22, 2002
28.	“Mode 4 Safety Culture Assessment”
29.	“Mode 5 Safety Culture Assessment”
30.	Report, “Root Cause Analysis Report: Assessment of Engineering Capabilities,” dated April 9, 2003
31.	Root Cause Analysis Report, “Significant Degradation of the Reactor Pressure Vessel Head; CR 2002-0891, Dated 3-8-2002,” dated April 15, 2002 and supplemented August 27, 2002
32.	Restart Building Block, “Containment Health Assurance Plan”
33.	Restart Building Block, “Management and Human Performance Excellence Plan”
34.	Restart Building Block, “Program Compliance Plan”
35.	Restart Building Block, “Reactor Head Resolution Plan”
36.	Restart Building Block, “Restart Test Plan”
37.	Restart Building Block, “System Health Assurance Plan”
38.	Restart Plan, “Management and Human Performance Improvement Plan”
39.	Restart Plan, “Restart Action Plan”
40.	Serial No. 1-1268, “Safety Significance Assessment of the Davis-Besse Nuclear Power Station, Unit I Reactor Pressure Vessel Head Degradation,” dated April 8, 2002
41.	Serial No. 1-1281, “Replacement of the Reactor Pressure Vessel Head at the Davis-Besse Nuclear Power Station,” dated August 9, 2002
42.	Serial No. 1-1285, “Verification of Technical Specification Pressure/Temperature Curves for Replacement Reactor Vessel Head,” dated January 22, 2003

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No.	Reference
43.	Serial No. 1-1286, “Confirmatory Action Letter Response - Management and Human Performance Root Cause Analysis Report on Failure to Identify Reactor Pressure Vessel Head Degradation,” dated August 21, 2002
44.	Serial No. 1-1299, “Submittal of Evaluations Performed at Davis-Besse to Address U.S. NRC Inspection Manual Chapter (IMC) 0350, Item Number 1, Adequacy of Root Cause Determination,” dated January 9, 2003
45.	Serial No. 1-1306, “Submittal of Collective Significance Review of the Causal Factors Associated with the RPV Head Degradation and Submittal of Revision 2 of the Management and Human Performance Improvement Plan,” dated March 27, 2003
46.	Serial No. 1-1324, “Notification of Information Provided to the Nuclear Regulatory Commission that May Not Be Complete and Accurate in All Material Respects,” dated July 15, 2003
47.	Serial No. 1-1325, “Notification of Information Provided to the Nuclear Regulatory Commission that May Not Be Complete and Accurate in All Material Respects,” dated August 15, 2003
48.	Serial No. 1-1328, “Notification of Information Provided to the Nuclear Regulatory Commission that May Not Be Complete and Accurate in All Material Respects,” dated September 15, 2003
49.	Serial No. 1-1330, “Final Report: Results of the Extent of Condition Review, NRC IMC 0350 Restart Checklist Item 3.i, ‘Process for Ensuring Completeness and Accuracy of Required Records and Submittals to the NRC,’” dated October 24, 2003
50.	Serial No. 2797, “10 CFR 50.55a Requests for Alternatives Pursuant to American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) Requirements at the Davis-Besse Nuclear Power Station - Third Ten-Year Interval Inservice Inspection Program (RR-A26 and RR-A27),” dated August 1, 2002
51.	Serial No. 2798, “10 CER 50.55a Request for Use of an Alternative to the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) Requirements for the Davis-Besse Nuclear Power Station - Third Ten-Year Interval Inservice Inspection Program (RR-A2 Revi Si on),” dated August 1, 2002
52.	Serial No. 2809, “10 CER 50.55a Requests for Alternatives Pursuant to American Society of Mechanical Engineers Boiler and Pressure Vessel Code Requirements at the Davis-Besse Nuclear Power Station - Third Ten-Year Interval Inservice Inspection Program (RR-A26 and RR-A27),” dated September 23, 2002
53.	Serial No. 2960, “Davis-Besse Nuclear Power Station License Amendment Application to Revise Technical Specifications Regarding Steam and Feedwater Rupture Control System (SFRCS) Instrumentation Setpoints and Surveillance Intervals (License Amendment Request No. 03-0010),” dated August 25, 2003
54.	Technical Specification 3.4.6.2
55.	Training Lesson Plan FEN-50.9E
56.	Training Lesson Plan FEN-50.9M
57.	Updated Final Safety Analysis Report

Appendix E – References

No.	Reference
	NRC Documents
58.	10 CFR § 50.46
59.	10 CFR § 50.55a
60.	10 CFR § 50.59
61.	10 CFR § 50.7
62.	10 CFR § 50.9
63.	10 CFR Part 50, Appendix J
64.	Administrative Letter 98-10, “Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety”
65.	Bulletin 2001-01, “Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles, dated August 3, 2001
66.	Generic Safety Issue 191, “Assessment of Debris Accumulation on PWR Sump Performance”
67.	Inspection Report (Special) 2002018 (Log 1-4420), dated July 24, 2003
68.	Inspection Report 50-346/02-08, dated October 2, 2002
69.	Inspection Report 50-346/02-11, dated July 7, 2003
70.	Inspection Report 50-346/03-04, dated May 9, 2003
71.	Inspection Report 50-346/03-08, dated May 30, 2003
72.	Inspection Report 50-346/03-09, dated July 7, 2003
73.	Inspection Report 50-346/03-17, dated September 29, 2003
74.	Letter (Log 6037) dated December 13, 2002, “Requests for Relief from American Society of Mechanical Engineers Boiler and Pressure Vessel Code Requirements for the Third 10-Year Interval Inservice Inspection Program (TAC No. MB5848)”
75.	Letter (Log 6038) dated December 13, 2002, “Requests for Relief from American Society of Mechanical Engineers Boiler and Pressure Vessel Code Requirements for the Third 10-Year Interval Inservice Inspection Program (TAC No. MB5849)”
76.	Letter dated April 29, 2002, Inspection Manual Chapter 0350 Oversight Panel
77.	Letter dated August 16, 2002, Restart Checklist (first)
78.	Letter, CAL No. 3-02-001, “Confirmatory Action Letter – Davis-Besse Nuclear Power Station,” dated March 13, 2002
79.	Letter, CAL No. 3-02-001B, “Update of Confirmatory Action Letter 3-02-001A Status for Davis-Besse Nuclear Power Station,” dated December 24, 2002

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No.	Reference
80.	Letter, CAL No. 3-02-001C, “Update of Confirmatory Action Letter 3-02-001B Status for Davis-Besse Nuclear Power Station,” dated January 21, 2003
81.	Letter, CAL No. 3-02-001D, “Update of Confirmatory Action Letter 3-02-001C Status for Davis-Besse Nuclear Power Station,” dated July 17, 2003
82.	Regulatory Guide 1.82, Revision 2, “Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident for Boiling Water Reactors”
	Miscellaneous Documents
83.	ANSI N45.2.11, “Quality Assurance Requirements for the Design of Nuclear Power Plants”
84.	ASME Code Section XI, 1995 Edition through the 1996 Addenda